# **Project Proposal: Digit Recognizer**

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### **Abstract**

BACKGROUND. The idea of recognizing digit. The goal in this project is to take an image of a handwritten single digit, and determine what that digit is. Kaggle competition. We propose to

- 1 Introduction
- 2 Approach
- 2.1 Baseline Methods
- 2.2 Methods to Investigate

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- [1] Alexander, J.A. & Mozer, M.C. (1995) Template-based algorithms for connectionist rule extraction. In G. Tesauro, D. S. Touretzky and T.K. Leen (eds.), *Advances in Neural Information Processing Systems 7*, pp. 609-616. Cambridge, MA: MIT Press.
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- [3] Hasselmo, M.E., Schnell, E. & Barkai, E. (1995) Dynamics of learning and recall at excitatory recurrent synapses and cholinergic modulation in rat hippocampal region CA3. *Journal of Neuroscience* **15**(7):5249-5262.